

**REMARKS:**

Claims 1-53 are currently pending in the application.

Claims 1-53 stand rejected under 35 U.S.C. § 101.

Claims 1-53 stand rejected under 35 U.S.C. § 112, second paragraph.

Claims 1, 2, 10-12, 18, 19, 27-29, 35, 36, 44-46, and 52 stand rejected under 35 U.S.C. § 102(e) over U.S. Patent No. 6,996,589 to Jayaram et al. ("*Jayaram*").

Claims 16, 17, 33, 34, 50, and 51 stand rejected under 35 U.S.C. § 103(a) over *Jayaram*.

Claims 3, 20, 37, and 53 stand rejected under 35 U.S.C. § 103(a) over *Jayaram* in view of U.S. Publication No. 2002/0046301 to Shannon et al. ("*Shannon*").

Claims 4-6, 21-23, 25, 38-40 and 42 stand rejected under 35 U.S.C. § 103(a) over *Jayaram* in view of U.S. Patent No. 6,381,709 to Casagrande et al. ("*Casagrande*").

Claims 13-15, 30-32, and 47-49 stand rejected under 35 U.S.C. § 103(a) over *Jayaram* in view of U.S. Publication No. 2003/0233249 to Walsh et al. ("*Walsh*").

Claims 7, 9, 24, 26, 41, and 43 stand rejected under 35 U.S.C. § 103(a) over *Jayaram* in view of *Casagrande* and in further view of *Walsh*.

The Applicants respectfully submit that all of the Applicants arguments and amendments are without prejudice or disclaimer. In addition, the Applicants have merely discussed example distinctions from the cited prior art. Other distinctions may exist, and as such, the Applicants reserve the right to discuss these additional distinctions in a future Response or on Appeal, if appropriate. The Applicants further respectfully submit that by not responding to additional statements made by the Examiner, the Applicants do not acquiesce to the Examiner's additional statements. The example distinctions discussed by the Applicants are considered sufficient to overcome the Examiner's rejections. In

addition, the Applicants reserve the right to pursue broader claims in this Application or through a continuation patent application. No new matter has been added.

**REJECTION UNDER 35 U.S.C. § 101:**

Claims 1-53 stand rejected under 35 U.S.C. § 101 as allegedly being directed towards non-statutory subject matter. The Applicants respectfully disagree and respectfully traverse the Examiner's rejection of Claims 1-53 under 35 U.S.C. § 101.

By this Amendment, the Applicants Claims have been amended to more particularly point out and distinctly claim the subject matter of Applicants invention. In addition, the Applicants respectfully submit that the amendments to Applicants claims are directed to patentable subject matter and are clearly directed to patentable subject matter. The Applicants further respectfully submit that these amendments are not considered narrowing or necessary for patentability. By making these amendments, the Applicants do not indicate agreement with or acquiescence to the Examiner's position with respect to the rejections of these claims under 35 U.S.C. § 101, as set forth in the Office Action.

**Claims 1-17, 52, and 53 are directed to statutory subject matter**

Specifically, the Examiner asserts that "Claims 1-17, 52, and 53 are rejected under 35 U.S.C. § 101 because "A computer-implemented system" comprising a server and interfaces (i.e., software) does not include any functional structure of a system [and that a] system (i.e., apparatus) comprising a server and interfaces (i.e., software) is considered as program per se, which is not one of the categories of statutory subject matter." (13 September 2007 Final Office Action, Page 2). The Applicants respectfully disagree.

In fact, the Applicants respectfully submit that the system, recited Applicants claims is not merely software as asserted by the Examiner, but instead, the system in Applicants claims is an apparatus and comprises a server. The server is also considered an apparatus (i.e., hardware), which is one of the categories of statutory subject matter. For example, the server as shown and described in Figure 1 and Applicants specification, at

least at Page 12, Line 30 through Page 13, Line 18, comprises a controller, the controller is an apparatus, the server which comprises an apparatus is also an apparatus and therefore, is clearly one of the categories of statutory subject matter.

The Applicants respectfully submit that Claims 1-17, 52, and 53 are directed to statutory subject matter and are considered to be in full compliance with the requirements of 35 U.S.C. § 101. The Applicants further respectfully submit that Claims 1-17, 52, and 53 are in condition for allowance. Thus, the Applicants respectfully request that the rejection of Claims 1-17, 52, and 53 under 35 U.S.C. § 101 be reconsidered and that Claims 1-17, 52, and 53 be allowed.

### **Claims 35-51 are directed to statutory subject matter**

The Examiner further asserts that “Claims 35-51 are rejected under 35 U.S.C. § 101 because ‘Software for executing bulk data transfers’ is considered as program per se, which is not one of the categories of statutory subject matter.” (13 September 2007 Final Office Action, Page 2). The Applicants respectfully disagree and respectfully point out that the Applicants claims actually recite “[s]oftware for executing bulk data transfers between persistent data stores in connection with an enterprise-level business workflow, ***the software being embodied in computer-readable media and when executed operable to***”. Therefore, as explained in more detail below, Applicants claims are in fact, one of the categories of statutory subject matter, and are therefore statutory under the governing law.

### **The Applicants Claims 35-51 Recite Statutory Subject Matter According to State Street**

In *State Street Bank & Trust Co. v. Signature Financial Group Inc.*, 149 F.3d 1368 (Fed. Cir. 1998), the Federal Circuit held that even purely mathematical algorithms are patentable if they are applied in a useful way. Independent Claim 35 is applied in a useful way – executing bulk data transfers between persistent data stores in connection with an enterprise-level business workflow - and is therefore statutory under the governing law. Accordingly, reconsideration of the Examiner's rejections is respectfully requested.

In *State Street*, the Federal Circuit stated that "Unpatentable mathematical algorithms are identifiable by showing they are merely abstract ideas constituting disembodied concepts or truths that are not 'useful'." *Id.* at 1373. "To be patentable, an algorithm must be applied in a 'useful' way." *Id.* Furthermore, the Federal Circuit noted: "the mere fact that a claimed invention involves inputting numbers, calculating numbers, outputting numbers, and storing numbers, in and of itself, would not render it nonstatutory subject matter, unless, of course, its operation does not produce a 'useful, concrete and tangible result.'" *Id.* The court in *State Street* went on to hold that "the transformation of data, representing discrete dollar amounts, by a machine through a series of mathematical calculations into a final share price, constitutes a practical application of a mathematical algorithm . . . because it produces a 'useful, concrete and tangible result' - a final share price momentarily fixed . . ." *Id.*

### **The Applicants Claims Produce Useful, Concrete, and Tangible Results**

The Applicants respectfully submit that Claims 35-51 likewise produce useful, concrete and tangible results. For example, independent Claims 35 recites software for executing bulk data transfers between persistent data stores in connection with an enterprise-level business workflow. Executing bulk data transfers between persistent data stores in connection with an enterprise-level business workflow is certainly a useful, concrete and tangible result. Claims 36-51 dependent from independent Claim 35 and also likewise produce useful, concrete and tangible results.

In addition, the Applicants respectfully direct the Examiner's attention to the Federal Circuit decision of *In Re Beauregard*, 53 F.3d 1583 (Fed. Cir. 1995), in which the Commissioner of the United States Patent and Trademark Office ("PTO") is quoted as stating, "**Computer programs embodied in a tangible medium, such as floppy diskettes, are patentable subject matter** under 35 U.S.C. § 101 and **must be examined** under 35 U.S.C. 102 and 103." *Id.* at 1584. (Emphasis Added). Again, independent Claim 35 recites "[s]oftware for executing bulk data transfers between persistent data stores in connection with an enterprise-level business workflow, **the software being embodied in computer-readable media and when executed**

***operable to***” and therefore is also statutory for at least this reason (in addition to its recitation of a useful, concrete and tangible result).

The Applicants respectfully submit that Claims 35-51 are directed to statutory subject matter and are considered to be in full compliance with the requirements of 35 U.S.C. § 101. The Applicants further respectfully submit that Claims 35-51 are in condition for allowance. Thus, the Applicants respectfully request that the rejection of Claims 35-51 under 35 U.S.C. § 101 be reconsidered and that Claims 35-51 be allowed.

In addition, the Applicants respectfully request that the Examiner call the undersigned, Steven J. Laureanti, at (480) 830-2700, if the Examiner has additional comments or suggestions to the 35 U.S.C. § 101 rejection of the subject Application or if the Examiner believes it would be easier to discuss the 35 U.S.C. § 101 rejection over the telephone.

**REJECTION UNDER 35 U.S.C. § 112 SECOND PARAGRAPH:**

Claims 1-53 stand rejected under 35 U.S.C. § 112, second paragraph, as allegedly being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regards as the invention. The Applicant respectfully disagrees.

Nonetheless, the Applicants have amended Claims 1, 12, 18, 29, 35, 46, 52, and 53 to more particularly point out and distinctly claim the subject matter of Applicants invention. By making these amendments, the Applicants do not indicate agreement with or acquiescence to the Examiner’s position with respect to the rejections of these claims under 35 U.S.C. § 112, as set forth in the Office Action.

The Applicants respectfully submit that Claims 1-53 are considered to be in full compliance with the requirements of 35 U.S.C. § 112. The Applicants further respectfully submit that Claims 1-53 are in condition for allowance. Thus, the Applicants respectfully request that the rejection of Claims 1-53 under 35 U.S.C. § 112 be reconsidered and that Claims 1-53 be allowed.

## **REJECTION UNDER 35 U.S.C. § 102(e):**

Claims 1, 2, 10-12, 18, 19, 27-29, 35, 36, 44-46, and 52 stand rejected under 35 U.S.C. § 102(e) over *Jayaram*. The Applicants respectfully disagree.

By this amendment, the Applicants have amended Claims 1, 12, 18, 29, 35, 46, 52, and 53 to more particularly point out and distinctly claim the Applicants invention. By making these amendments, the Applicants do not indicate agreement with or acquiescence to the Examiner's position with respect to the rejections of these claims under 35 U.S.C. § 102(e), as set forth in the Office Action.

The Applicants respectfully submit that the ***amendments to independent Claims 1, 18, 35, 52, and 53 have rendered moot the Examiner's rejection of these claims and the Examiner's arguments in support of the rejection of these claims.*** The Applicants further respectfully submit that amended independent Claims 1, 18, 35, 52, and 53 in their current amended form contain unique and novel limitations that are not taught, suggested, or even hinted at in *Jayaram*. Thus, the Applicants respectfully traverse the Examiner's rejection of Claims 1, 2, 10-12, 18, 19, 27-29, 35, 36, 44-46, and 52 under 35 U.S.C. § 102(e) over *Jayaram*.

### ***Jayaram Fails to Disclose, Teach, or Suggest Various Limitations Recited in Applicant's Claims***

For example, with respect to amended independent Claim 1, this claim recites:

***A computer-implemented system for executing bulk data transfers between persistent data stores in connection with an enterprise-level business workflow, comprising:***

***a data integration server*** coupled to one or more persistent data stores, the data integration server comprising:

***one or more programmatic source interfaces***, each being associated with a corresponding source data store, defined according to a common programmatic source interface specification, and exposed within the data integration server during a bulk data transfer in connection with an enterprise-level business workflow to enable the data integration server to extract from the corresponding source data store one or more data entities for loading into any one or more selected target data stores during the bulk data transfer; and

**one or more programmatic target interfaces**, each being associated with a corresponding target data store, defined according to a common programmatic target interface specification, and exposed within the data integration server during the bulk data transfer in connection with an enterprise-level business workflow to enable the data integration server to load into the corresponding target data store the one or more data entities extracted from any one or more selected source data stores during the bulk data transfer,

wherein each of the one or more programmatic source interfaces and the one or more programmatic target interfaces is operable to:

provide to the corresponding source and target data stores an abstraction of bulk data transfer operations within the data integration server such that custom code need not be developed in connection with the corresponding source and target data stores to enable bulk data transfers between the corresponding source and target data stores and any other persistent data store coupled with the data integration server; and

isolate from the data integration server specific details associated with the corresponding source and target data stores such that custom code need not be developed in connection with the data integration server to enable bulk data transfers between the corresponding source and target data stores and any other persistent data store coupled with the data integration server. (Emphasis Added).

In addition, *Jayaram* fails to disclose each and every limitation of amended independent Claims 18, 35, and 53.

The Applicants respectfully submit that *Jayaram* fails to disclose, teach, or suggest amended independent Claim 1 limitations regarding a “**computer-implemented system for executing bulk data transfers between persistent data stores in connection with an enterprise-level business workflow**”. In particular, the Examiner notes that “*Jayaram* does teach the flow of business data between systems (320 and 310, fig 3) in an enterprise (e.g., telecommunication or billing) (col. 16, lines 1-12)”. (13 September 2007 Final Office Action, Page 15). The Applicants respectfully disagree. In fact, the Applicants respectfully direct the Examiner’s attention to the cited portion of *Jayaram*:

unit/object of information (305), which comprises a structure for the data to be converted from the source system (320) to the target system

(310). The basic unit of information (305) may be decided by employing the business object decision process (300, see, FIG. 3) and determining a basic business object (305). For instance, in the embodiment shown in FIG. 3, a source billing system (320) may be comprised of customers (325) as the basic unit of conversion (305). Every customer (325) in the billing system (320) can have one or more addresses (350) in the billing system (320) can have one or more addresses (350) and phone lines (360). Embodiments of this invention are not, however, limited to telecommunications and billing.

(Column 15, Lines 1-12). (Emphasis Added). However, the Applicants note that *Jayaram* merely discloses a business object decision process (300) (i.e., a PCS phone billing system) that includes customer's names, addresses, phone numbers, a source database 310, and a target database (310). In fact, it appears that the Examiner is equating "executing bulk data transfers between persistent data stores in connection with an enterprise-level business workflow" recited in amended independent Claim 1 with the "**PCS phone billing system**" disclosed in *Jayaram*. (13 September 2007 Final Office Action, Page 15). However, as discussed above, the "**PCS phone billing system**" disclosed in *Jayaram* merely includes customer's names, addresses, phone numbers, a source database 310, and a target database (310), but **does not include, involve, or even relate to executing bulk data transfers between persistent data stores in connection with an enterprise-level business workflow**, as recited in amended independent Claim 1. (Column 11, Lines 34-38 and Column 12, Lines 1-12). Thus, the Applicants respectfully submit that the equations forming the foundation of the Examiner's comparison between *Jayaram* and amended independent Claim 1 cannot be made. The Applicants further respectfully submit that these distinctions alone are sufficient to patentably distinguish amended independent Claim 1 from *Jayaram*.

The Applicants further respectfully submit that *Jayaram* fails to disclose, teach, or suggest amended independent Claim 1 limitations regarding a "**data integration server** coupled to one or more persistent data stores". In particular, the Examiner equates the "**data integration server**" recited in amended independent Claim 1 with the "**database conversion engine**" disclosed in *Jayaram*. (13 September 2007 Final Office Action, Page 4). However, **the database conversion engine disclosed in Jayaram** merely



comprises computer executable instructions, but **does not include, involve, or even relate to the data integration server**, as recited in amended independent Claim 1. (Column 10, Lines 56-63). In addition, the “**database conversion engine**” disclosed in *Jayaram* is not coupled with one or more persistent data stores and does not comprise one or more programmatic source interfaces. In contrast, the “**data integration server**” recited in amended independent Claim 1 **is coupled with one or more persistent data stores and comprises one or more programmatic source interfaces and one or more programmatic target interfaces**. Thus, the Applicants respectfully submit that the equations forming the foundation of the Examiner’s comparison between *Jayaram* and amended independent Claim 1 cannot be made. The Applicants further respectfully submit that these distinctions alone are sufficient to patentably distinguish amended independent Claim 1 from *Jayaram*.

The Applicants respectfully submit that *Jayaram* fails to disclose, teach, or suggest amended independent Claim 1 limitations regarding “**one or more programmatic source interfaces**, each being associated with a corresponding source data store, defined according to a common programmatic source interface specification, and exposed within the data integration server during a bulk data transfer in connection with an enterprise-level business workflow to enable the data integration server to extract from the corresponding source data store one or more data entities for loading into any one or more selected target data stores during the bulk data transfer” and “**one or more programmatic target interfaces**, each being associated with a corresponding target data store, defined according to a common programmatic target interface specification, and exposed within the data integration server during the bulk data transfer in connection with an enterprise-level business workflow to enable the data integration server to load into the corresponding target data store the one or more data entities extracted from any one or more selected source data stores during the bulk data transfer”.

In particular, the Examiner equates the “**one or more programmatic source interfaces**” recited in amended independent Claim 1 with the “**data filter 234**” disclosed in *Jayaram* and equates the “**one or more programmatic target interfaces**” recited in

amended independent Claim 1 with a **“final upload process 270”** disclosed in *Jayaram*. (13 September 2007 Final Office Action, Page 4). However, the **“data filter 234”** disclosed in *Jayaram* merely converts source data from a fixed format to an XML and the **“final upload process 270”** disclosed in *Jayaram* **is merely an upload process that may be provided to only load** the target data into the database, but **does not include, involve, or even relate to the one or more programmatic source interfaces or the one or more programmatic target interfaces**, as recited in amended independent Claim 1. (Column 12, Lines 4-33).

In contrast, the **“one or more programmatic source interfaces”** recited in amended independent Claim 1 are each associated with a corresponding source data store, defined according to a common programmatic source interface specification, and exposed within the data integration server during a bulk data transfer in connection with an enterprise-level business workflow which enable the data integration server to extract from the corresponding source data store one or more data entities for loading into any one or more selected target data stores during the bulk data transfer. Further in contrast, the **“one or more programmatic target interfaces”** recited in amended independent Claim 1 are each associated with a corresponding target data store, defined according to a common programmatic target interface specification, and exposed within the data integration server during the bulk data transfer in connection with an enterprise-level business workflow to enable the data integration server to load into the corresponding target data store the one or more data entities extracted from any one or more selected source data stores during the bulk data transfer”. Thus, the Applicants respectfully submit that the equations forming the foundation of the Examiner’s comparison between *Jayaram* and amended independent Claim 1 cannot be made. The Applicants further respectfully submit that these distinctions alone are sufficient to patentably distinguish amended independent Claim 1 from *Jayaram*.

### **The Office Action Fails to Properly Establish a *Prima Facie* case of Anticipation over *Jayaram***

The Applicants respectfully submit that the allegation in the present Office Action that *Jayaram* discloses all of the claimed features is respectfully traversed. Further, it is noted that the Office Action provides no concise explanation as to how *Jayaram* is considered to anticipate ***all of the limitations*** in Claims 1, 2, 10-12, 18, 19, 27-29, 35, 36, 44-46, and 52. ***A prior art reference anticipates the claimed invention under 35 U.S.C. § 102 only if each and every element of a claimed invention is identically shown in that single reference.*** MPEP § 2131. (Emphasis Added).

With respect to the subject application, the Examiner has not adequately supported the rejection under 35 U.S.C. § 102, because the Examiner has not shown how each and every element of the Applicants claimed invention is identically shown in *Jayaram*. For example, the Examiner asserts that the “***data integration server***”, in amended independent Claim 1 is somehow equivalent to a ***database conversion engine***. (13 September 2007 Final Office Action, Page 4). The Applicants respectfully disagree and further respectfully request clarification as to how the Examiner arrives at this conclusion. In another example, the Examiner asserts that “***one or more programmatic source interfaces***”, in amended independent Claim 1 is somehow equivalent to ***data filter 234***. (13 September 2007 Final Office Action, Page 4). The Applicants respectfully disagree and further respectfully request clarification as to how the Examiner arrives at this conclusion. In still another example, the Examiner asserts that “***one or more programmatic target interfaces***”, in amended independent Claim 1 is somehow equivalent to ***final upload process 270***. (13 September 2007 Final Office Action, Page 4). The Applicants respectfully disagree and further respectfully request clarification as to how the Examiner arrives at this conclusion.

The Applicants respectfully points out that "it is incumbent upon the examiner to identify wherein each and every facet of the claimed invention is disclosed in the applied reference." Ex parte Levy, 17 U.S.P.Q.2d (BNA) 1461, 1462 (Pat. & Tm. Off. Bd. Pat. App. & Int. 1990). The Applicants respectfully submits that ***the Office Action has failed to establish a prima facie case of anticipation in Claims 1, 2, 10-12, 18, 19, 27-29, 35, 36, 44-46, and 52 under 35 U.S.C. § 102 with respect to Jayaram because Jayaram***

***fails to identically disclose each and every element of the Applicants claimed invention, arranged as they are in Applicants claims.***

### **The Applicants Claims are Patentable over *Jayaram***

Amended independent Claims 18, 35, and 52 are considered patentably distinguishable over *Jayaram* for at least the reasons discussed above in connection with amended independent Claim 1.

Furthermore, with respect to dependent Claims 2, 10-12, 19, 27-29, 36, and 44-46: Claims 2 and 10-12 depend from amended independent Claim 1; Claims 19 and 27-29 depend from amended independent Claim 18; and Claims 36 and 44-46 depend from amended independent Claim 35 and are also considered patentably distinguishable over *Jayaram*. Thus, dependent Claims 2, 10-12, 19, 27-29, 36, and 44-46 are considered to be in condition for allowance for at least the reason of depending from an allowable claim.

Thus, for at least the reasons set forth herein, the Applicants respectfully submit that Claims 1, 2, 10-12, 18, 19, 27-29, 35, 36, 44-46, and 52 are not anticipated by *Jayaram*. The Applicants further respectfully submit that Claims 1, 2, 10-12, 18, 19, 27-29, 35, 36, 44-46, and 52 are in condition for allowance. Thus, the Applicants respectfully request that the rejection of Claims 1, 2, 10-12, 18, 19, 27-29, 35, 36, 44-46, and 52 under 35 U.S.C. § 102 (e) be reconsidered and that Claims 1, 2, 10-12, 18, 19, 27-29, 35, 36, 44-46, and 52 be allowed.

### **THE LEGAL STANDARD FOR ANTICIPATION REJECTIONS UNDER 35 U.S.C. § 102:**

The following sets forth the legal standards for "anticipation."

The events that can lead to anticipation can be divided into the following seven categories, all defined by statute:

1. Prior Knowledge: The invention was publicly known in the United States before the patentee invented it.

2. Prior Use: The invention was publicly used in the United States either (i) before the patentee invented it; or (ii) more than one year before he filed his patent application.

3. Prior Publication: The invention was described in a printed publication anywhere in the world either (i) before the patentee invented it; or (ii) more than one year before he filed his patent application.

4. Prior Patent: The invention was patented in another patent anywhere in the world either (i) before the patentee invented it; or (ii) more than one year before he filed his application.

5. On Sale: The invention was on sale in the United States more than one year before the patentee filed his application.

6. Prior Invention: The invention was invented by another person in the United States before the patentee invented it, and that other person did not abandon, suppress or conceal the invention.

7. Prior U.S. Patent: The invention was described in a patent granted on a patent application filed in the United States before the patentee made the invention.

Each of those seven events has its own particular requirements, but they all have the following requirements in common:

1. Anticipation must be shown by clear and convincing evidence.
2. If one prior art reference completely embodies the same process or product as any claim, the product or process of that claim is anticipated by the prior art, and that claim is invalid. To decide whether anticipation exists, one must consider each of the elements recited in the claim and determine whether all of them are found in the particular item alleged to be anticipating prior art.
3. There is no anticipation unless every one of those elements is found in a *single* prior publication, prior public use, prior invention, prior patent, prior knowledge or

prior sale. One may not combine two or more items of prior art to make out an anticipation. One should, however, take into consideration, not only what is expressly disclosed or embodied in the particular item of prior art, but also what inherently occurred in its practice.

4. There cannot be an accidental or unrecognized anticipation. A prior duplication of the claimed invention that was accidental, or unrecognized, unappreciated, and incidental to some other purpose is not an invalidating anticipation.

Those four requirements must be kept in mind and applied to each kind of anticipation in issue. The following additional requirements apply to some categories of anticipation.

1. Prior Knowledge: An invention is anticipated if it was known by others in the United States before it was invented by the patentee. "Known," in this context, means known to the public. Private knowledge, secret knowledge or knowledge confined to a small, limited group is not necessarily an invalidating anticipation. Things that were known to the public only outside the United States are not invalidating anticipation.

2. Prior Use: An invention is anticipated if it was used by others before it was invented by the patentee, or more than one year before the patentee filed his patent application. "Use," in this context, means a public use.

3. Prior Publication: A patent is invalid if the invention defined by the Claims was described in a printed publication before it was invented by the patentee or more than one year prior to the filing date of his application. For a publication to constitute an anticipation of an invention, it must be capable, when taken in conjunction with the knowledge of people of ordinary skill in the art, of placing the invention in the possession of the reader. The disclosure must be enabling and meaningful. In determining whether the disclosure is complete, enabling, and meaningful, one should take into account what would have been within the knowledge of a person of ordinary skill in the art at the time, and one may consider other publications that shed light on the knowledge such a person would have had.

4. Prior Patent: If the invention defined by the claims was patented in the United States or a foreign country, either before it was invented by the inventor or more than one year before the inventor filed his patent application, then the invention was anticipated. The effective date for this type of anticipation is the date on which two things co-existed: (i) the owner of the referenced patent had the right to enforce that patent; and (ii) the reference patent was available to the public. What was "patented" in the reference patent is determined by what is defined by its claims, interpreted in the light of the general description.

5. On Sale: A patent is invalid if the invention claimed in it was on sale in the United States more than one year prior to the application filing date.

6. Prior Invention: If the invention defined by the claims was invented by another person, in the United States, before it was invented by the inventor, and that other person did not abandon, suppress, or conceal the invention, the invention lacks novelty. A prior invention, even if put in physical form and shown to produce the desired result, is not an invalidating anticipation unless some steps were taken to make it public. However, it is not necessary that the inventor had knowledge of that prior invention.

7. Prior U.S. Application: A patent is invalid for lack of novelty if the invention defined by the claims was described in a United States patent issued on a patent application filed by another person before the invention was made by the inventor. The effective date of a prior application for purposes of this issue is the date on which it was filed in the United States. Foreign-filed patent applications do not apply. If the issued United States patent claims the benefit of more than one United States application, its effective date as an anticipation is the filing date of the first United States application that discloses the invention claimed in that referenced patent.

Experimental Use Exception: The law recognizes that it is beneficial to permit the inventor the time and opportunity to develop his invention. As such there is an "experimental use" exception to the "public use" and "on sale" rules. Even though the invention was publicly used or on sale, more than one year prior to the application filing date, that does not invalidate the patent, provided the principal purpose was experimenta-

tion rather than commercial benefit. If the primary purpose was experimental, it does not matter that the public used the invention or that the inventor incidentally derived profit from it.

When a public use or sale is shown, the burden is on the inventor to come forward with evidence to support the experimental use exception. Only experimentation by or under the control of the inventor qualifies for this exception. Experimentation by a third party, for its own purposes, does not qualify for this exception. Once the invention leaves the inventor's control, its use is a public one, even if further experimentation takes place.

The experimentation must relate to the claimed features of the invention. And it must be for the purpose of technological improvement, not commercial exploitation. If any commercial exploitation does occur, it must be merely incidental to the primary purpose of experimentation. A test done primarily for marketing, and only incidentally for technological improvement, is a public use.

**REJECTION UNDER 35 U.S.C. § 103(a):**

Claims 16, 17, 33, 34, 50, and 51 stand rejected under 35 U.S.C. § 103(a) over *Jayaram*.

Claims 3, 20, 37, and 53 stand rejected under 35 U.S.C. § 103(a) over *Jayaram* in view of *Shannon*.

Claims 4-6, 21-23, 25, 38-40 and 42 stand rejected under 35 U.S.C. § 103(a) over *Jayaram* in view of *Casagrande*. Claims 13-15, 30-32, and 47-49 stand rejected under 35 U.S.C. § 103(a) over *Jayaram* in view of *Walsh*.

Claims 7, 9, 24, 26, 41, and 43 stand rejected under 35 U.S.C. § 103(a) over *Jayaram* in view of *Casagrande* and in further view of *Walsh*.

The Applicants respectfully submit that the proposed combination of *Jayaram*, *Shannon*, *Casagrande*, and *Walsh*, either individually or in combination fails to disclose each and every limitation recited by Claims 3-7, 9, 13-16, 17, 20-24, 25, 26, 30-33, 34, 37-



41, 42, 43, 47-50, 51, and 53. The Applicants further respectfully submit that Claims 3-7, 9, 13-16, 17, 20-24, 25, 26, 30-33, 34, 37-41, 42, 43, 47-50, 51, and 53 patentably distinguish over the proposed combination of *Jayaram*, *Shannon*, *Casagrande*, and *Walsh*. Thus, the Applicants respectfully traverse the Examiner's obvious rejection of Claims 3-7, 9, 13-16, 17, 20-24, 25, 26, 30-33, 34, 37-41, 42, 43, 47-50, 51, and 53 under 35 U.S.C. § 103(a) over the proposed combination of *Jayaram*, *Shannon*, *Casagrande*, or *Walsh*, either individually or in combination.

### **The Office Action Acknowledges that *Jayaram* Fails to Disclose Various Limitations Recited in Applicants Claims**

The Applicants respectfully submit that the Office Action acknowledges, and the Applicants agree, that *Jayaram* fails to disclose various limitations recited in amended independent Claim 1. Specifically the Examiner acknowledges that *Jayaram* fails to teach “*isolating transformation logic from defined programmatic interfaces*”, “*JAVA interfaces*”, “*industry standard interface and industry standard protocol*”, “*industry standard File Transfer Protocol (FTP) interface and FTP industry standard protocol*”, “*Extract-Transform-Load (ETL) tool*”, and “*to support compatibility between any commercially available ETL tool*”. (13 September 2007 Final Office Action, Pages 7-14). However, the Examiner asserts that the cited portions of *Shannon*, *Casagrande*, and *Walsh* disclose the acknowledged shortcomings in *Jayaram*. The Applicants respectfully traverse the Examiner's assertions regarding the subject matter disclosed in *Shannon*, *Casagrande*, and *Walsh*.

### **The Office Action Fails to Properly Establish a *Prima Facie* case of Obvious over the Proposed *Jayaram-Shannon-Casagrande-Walsh* Combination According to the UPSTO Examination Guidelines**

The Applicants respectfully submit that the Office Action fails to properly establish a *prima facie* case of obviousness based on the proposed combination of *Jayaram*, *Shannon*, *Casagrande*, and *Walsh*, either individually or in combination, and in particular, the Office Action fails to establish a *prima facie* case of obviousness based on the

“Examination Guidelines for Determining Obviousness Under 35 U.S.C. 103 in View of the Supreme Court Decision in *KSR International Co. v. Teleflex Inc.*” (the “Guidelines”).

As reiterated by the Supreme Court in *KSR International Co. v. Teleflex Inc.* (*KSR*), the framework for the objective analysis for determining obviousness under 35 U.S.C. 103 is stated in *Graham v. John Deere Co.* (383 U.S. 1, 148 USPQ 459 (1966)). Obviousness is a question of law based on underlying factual inquiries. These factual inquiries enunciated by the Court are as follows:

- (1) Determining the scope and content of the prior art;
- (2) Ascertaining the differences between the claimed invention and the prior art; and
- (3) Resolving the level of ordinary skill in the pertinent art.

(Notice, 72 Fed. Reg. 57527 (Oct. 10, 2007)). Objective evidence relevant to the issue of obviousness must be evaluated by Office personnel. (383 U.S. 17–18, 148 USPQ 467 (1966)). As stated by the Supreme Court in *KSR*, “While the sequence of these questions might be reordered in any particular case, the [*Graham*] factors continue to define the inquiry that controls.” (*KSR*, 550 U.S. at \_\_\_, 82 USPQ2d at 1391).

However, it is important to note that the Guidelines require that Office personnel “**ensure that the written record includes findings of fact** concerning the state of the art and the teachings of the references applied. (Notice, 72 Fed. Reg. 57527 (Oct. 10, 2007)). In addition, the Guidelines remind Office personnel that the “**factual findings made by Office personnel are the necessary underpinnings to establish obviousness.**” (*id.*). Further, “**Office personnel must provide an explanation to support an obviousness rejection** under 35 U.S.C. 103. (*id.*). In fact, “35 U.S.C. 132 requires that the applicant be notified of the reasons for the rejection of the claim so that he or she can decide how best to proceed” and “clearly setting forth findings of fact and the rationale(s) to support a rejection in an Office action leads to the prompt resolution of issues pertinent to patentability.” (*id.*).

With respect to the subject application, the Office Action has not shown the **factual findings necessary to establish obviousness** or even **an explanation to support the**

**obviousness rejection** based on the proposed combination of *Jayaram, Shannon, Casagrande, and Walsh*. The Office Action merely states that “it would have been obvious to one having ordinary skill in the art at the time of the invention was made: that the transformation logic can be coded separately from logical relationship” and “to support ETL tool or any type of tools for the data stores”. (13 September 2007 Final Office Action, Pages 7-14). The Applicants respectfully disagree and respectfully submit that the Examiner’s conclusory statement is not sufficient to establish the ***factual findings necessary to establish obviousness*** and is not a sufficient ***explanation to support the obviousness rejection*** based on the proposed combination of *Jayaram, Shannon, Casagrande, and Walsh*.

The Guidelines further provide guidance to Office personnel in “determining the scope and content of the prior art” such as, for example, “Office personnel must first obtain a thorough understanding of the invention disclosed and claimed in the application.” (Notice, 72 Fed. Reg. 57527 (Oct. 10, 2007)). The scope of the claimed invention must be clearly determined by giving the claims the “broadest reasonable interpretation consistent with the specification.” (See *Phillips v. AWH Corp.*, 415 F.3d 1303, 1316, 75 USPQ2d 1321, 1329 (Fed. Cir. 2005) and MPEP § 2111.). In addition, the Guidelines state that any “***obviousness rejection should include***, either explicitly or implicitly in view of the prior art applied, ***an indication of the level of ordinary skill.***” (Notice, 72 Fed. Reg. 57528 (Oct. 10, 2007)). With respect to the subject Application, the Office Action has not provided ***an indication of the level of ordinary skill.***

The Guidelines still further provide that once the *Graham* factual inquiries are resolved, Office personnel must determine whether the claimed invention would have been obvious to one of ordinary skill in the art. (*Id.*). For example, the Guidelines state that ***Office personnel must explain why the difference(s) between the prior art and the claimed invention would have been obvious to one of ordinary skill in the art.*** (*Id.*). In addition, the Guidelines state that the proper analysis is ***whether the claimed invention would have been obvious to one of ordinary skill in the art after consideration of all the facts.*** (*Id.* and See 35 U.S.C. 103(a)).

With respect to the subject Application, the Office Action has not expressly resolved any of the *Graham* factual inquiries to determine whether Applicants invention would have been obvious to one of ordinary skill in the art. In addition, the Office Action fails to ***explain why the difference(s) between the proposed combination of Jayaram, Shannon, Casagrande, Walsh, and the Applicants claimed invention would have been obvious to one of ordinary skill in the art.*** The Office Action merely states that “because by doing so it would be easier to develop separate segments of codes in a complex software system”, “because *Shannon* teaching of JAVA interfaces would provide a greater ease of integration by allowing data to be mapped from one application to another application”, “because *Casagrande* teaching of industry standard protocol interface would enhance and make it easier for *Jayaram*’s system to transfer data between data stores using well known protocol such as FTP”, “in order to provide a data store independent system allowing data conversion from any source data stores into any target data stores”, and “because *Walsh*’s teaching of ETL tool would enhance the transfer mechanism in *Jayaram*’s and *Casagrande*’s systems by providing extraction of data from a data source”. (13 September 2007 Final Office Action, Pages 7-14). The Applicants respectfully disagree and further respectfully request clarification as to how this statement ***explains why the difference(s) between the proposed combination of Jayaram, Shannon, Casagrande, Walsh, and the Applicants claimed invention would have been obvious to one of ordinary skill in the art.*** The Applicants further respectfully submit that the Examiner is using the subject Application as a template to formulate reconstructive hindsight, which constitutes impermissible use of hindsight under 35 U.S.C. § 103(a).

The Guidelines yet further state that the “key to supporting any rejection under 35 U.S.C. 103 is the ***clear articulation of the reason(s) why the claimed invention would have been obvious.***” (Notice, 72 Fed. Reg. 57528 (Oct. 10, 2007)). In fact, the Supreme Court in *KSR* noted that “***the analysis supporting a rejection under 35 U.S.C. 103 should be made explicit.***” (*id.*). The Court quoting *In re Kahn* (441 F.3d 977, 988, 78 USPQ2d 1329, 1336 (Fed. Cir. 2006)), stated that “[R]ejections on ***obviousness cannot be sustained by mere conclusory statements***; instead, there ***must be some articulated reasoning with some rational underpinning to support the legal***

**conclusion of obviousness.”** (KSR, 550 U.S. at \_\_\_, 82 USPQ2d at 1396). The Guidelines provide the following seven rationales:

- (A) Combining prior art elements according to known methods to yield predictable results;
- (B) Simple substitution of one known element for another to obtain predictable results;
- (C) Use of known technique to improve similar devices (methods, or products) in the same way;
- (D) Applying a known technique to a known device (method, or product) ready for improvement to yield predictable results;
- (E) “Obvious to try”—choosing from a finite number of identified, predictable solutions, with a reasonable expectation of success;
- (F) Known work in one field of endeavor may prompt variations of it for use in either the same field or a different one based on design incentives or other market forces if the variations would have been predictable to one of ordinary skill in the art;
- (G) Some teaching, suggestion, or motivation in the prior art that would have led one of ordinary skill to modify the prior art reference or to combine prior art reference teachings to arrive at the claimed invention.

The Applicants respectfully submit that the **Office Action fails to provide any articulation, let alone, clear articulation of the reasons why the Applicants claimed invention would have been obvious**. For example, the **Examiner has not adequately supported the selection and combination of Jayaram, Shannon, Casagrande, and Walsh to render obvious the Applicants claimed invention**. The Examiner's unsupported conclusory statements that “it would have been obvious to one having ordinary skill in the art at the time of the invention was made: that the transformation logic can be coded separately from logical relationship”, “to support ETL tool or any type of tools for the data stores”, “because by doing so it would be easier to develop separate segments of codes in a complex software system”, “because *Shannon* teaching of JAVA interfaces would provide a greater ease of integration by allowing data to be mapped from one application to another application”, “because *Casagrande* teaching of industry standard protocol interface would enhance and make it easier for *Jayaram*’s system to transfer data between data stores using well known protocol such as FTP”, “in order to provide a data store independent system allowing data conversion from any source data stores into any target data stores”, and “because *Walsh*’s teaching of ETL tool would

enhance the transfer mechanism in *Jayaram's* and *Casagrande's* systems by providing extraction of data from a data source”, ***does not adequately provide clear articulation of the reasons why the Applicants claimed invention would have been obvious.*** (13 September 2007 Final Office Action, Pages 7-14). In addition, the Examiner’s unsupported conclusory statement fails to meet any of the Guidelines rationales to render obvious the Applicants claimed invention.

Thus, if the Examiner continues to maintain the obvious rejection based on the proposed combination of *Jayaram*, *Shannon*, *Casagrande*, and *Walsh*, the Applicants respectfully request that the Examiner provide proper support for the obviousness rejection under 35 U.S.C. 103 as necessitated by the Guidelines.

### **The Applicants Claims are Patentable over the Proposed *Jayaram-Shannon-Casagrande-Walsh* Combination**

The Applicants respectfully submit that as discussed above, amended independent Claims 1, 18, 35, and 52 are considered patentably distinguishable over *Jayaram*. In addition, the Applicants respectfully submit that amended independent Claim 53 is considered patentably distinguishable over *Jayaram* for at least the reasons discussed above in connection with amended independent Claims 1, 18, 35, and 52.

Furthermore, with respect to dependent Claims 3-7, 9, 13-16, 17, 20-24, 25, 26, 30-33, 34, 37-41, 42, 43, 47-50, and 51: Claims 3-7, 9, 13-16, and 17 depend from amended independent Claim 1; Claims 20-24, 25, 26, 30-33, and 34 depend from amended independent Claim 18; and Claims 37-41, 42, 43, 47-50, and 51 depend from amended independent Claim 35. As mentioned above, each of amended independent Claims 1, 18, 35, 52, and 53 are considered patentably distinguishable over the proposed combination of *Jayaram*, *Shannon*, *Casagrande*, or *Walsh*, either individually or in combination. Thus, dependent Claims 3-7, 9, 13-16, 17, 20-24, 25, 26, 30-33, 34, 37-41, 42, 43, 47-50, and 51 are considered to be in condition for allowance for at least the reason of depending from an allowable claim.

For at least the reasons set forth herein, the Applicants respectfully submit that Claims 3-7, 9, 13-16, 17, 20-24, 25, 26, 30-33, 34, 37-41, 42, 43, 47-50, 51, and 53 are not rendered obvious by the proposed combination of *Jayaram*, *Shannon*, *Casagrande*, or *Walsh*. The Applicants further respectfully submit that Claims 3-7, 9, 13-16, 17, 20-24, 25, 26, 30-33, 34, 37-41, 42, 43, 47-50, 51, and 53 are in condition for allowance. Thus, the Applicants respectfully request that the rejection of Claims 3-7, 9, 13-16, 17, 20-24, 25, 26, 30-33, 34, 37-41, 42, 43, 47-50, 51, and 53 under 35 U.S.C. § 103(a) be reconsidered and that Claims 3-7, 9, 13-16, 17, 20-24, 25, 26, 30-33, 34, 37-41, 42, 43, 47-50, 51, and 53 be allowed.

**CONCLUSION:**

In view of the foregoing amendments and remarks, this application is considered to be in condition for allowance, and early reconsideration and a Notice of Allowance are earnestly solicited.

A Request for Continued Examination (RCE) is being filed electronically herewith to facilitate the processing of this deposit account authorization. **The Director is hereby authorized to charge the \$810.00 RCE fee to Deposit Account No. 500777.** Although the Applicants believe no additional fees are deemed to be necessary; the undersigned hereby authorizes the Director to charge any additional fees which may be required, or credit any overpayments, to **Deposit Account No. 500777.** If an extension of time is necessary for allowing this Response to be timely filed, this document is to be construed as also constituting a Petition for Extension of Time Under 37 C.F.R. § 1.136(a) to the extent necessary. Any fee required for such Petition for Extension of Time should be charged to **Deposit Account No. 500777.**

**Please link this application to Customer No. 53184 so that its status may be checked via the PAIR System.**

Respectfully submitted,

12 December 2007  
Date

/Steven J. Laureanti/signed  
Steven J. Laureanti, Registration No. 50,274

BOOTH UDALL, PLC  
1155 W. Rio Salado Pkwy., Ste. 101  
Tempe AZ, 85281  
214.636.0799 (mobile)  
480.830.2700 (office)  
480.830.2717 (fax)  
steven@boothudall.com

**CUSTOMER NO. 53184**